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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/848,838

05/18/2004

Raymond J. Martin

MAT 3J5

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EXAMINER

SUTHERS, DOUGLAS JOHN

ART UNIT

PAPER NUMBER

2615

MAIL DATE

DELIVERY MODE

01/09/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/848,838

Applicant(s)

MARTIN ET AL.

Examiner

Douglas Suthers

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/23/04, 11/13/06, 5/1/07.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 20 recites "a second sensible action when sound in the **second** frequency range is received ", however such is not disclosed, perhaps what is intended is: "a second sensible action when sound in the **third** frequency range is received".

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7, 27, and 46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 46, the claim recites the limitation "The method of claim 45". There is insufficient antecedent basis for this limitation in the claim. The claim should read "The toy of claim 45".

Regarding claims 7 and 27, the claims recite the limitation "a third frequency range that is more than twice the second frequency range". It is unclear in what dimension the ranges are being compared, (i.e. bandwidth, center frequency).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hampton et al. (US 6149490) in view of Atsmon et al. (US2006/0136544 A1).

Regarding claim 1, Hampton discloses a toy comprising:

a body (figure 2, item 12);

a signal detector (figure 44, items 1010 and 1008) adapted to detect signals in at least a first frequency range above normal human speech (IR frequencies); and

an output apparatus mounted in the body and adapted to produce a first sensible action when sound is detected in the first frequency range (speaker 1052 converses, column 3 line 53 to column 4 line 22).

Hampton does not expressly disclose wherein the signals are sound signals.

Atsmon discloses a toy ([0007]) that contains communication links, wherein communication links such as IR links may use ultrasonic links instead (paragraph [0003], and may include a range above about normal human speech (paragraph [0010])).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the communication link of Atsmon in the system of Hampton. The motivation for doing so would have been eliminating the need for IR transmitters and receivers, thereby reducing costs. Therefore, it would have been obvious to combine Atsmon with Hampton to obtain the invention as specified in claim 1.

Regarding claim 2, Hampton discloses wherein the signal detector is further adapted to detect sound in a second frequency range different than the first frequency range (microphone range), and the output apparatus is further configured to produce a second sensible action when sound is detected in the second frequency range (foot taps, column 3 line 53 to column 4 line 22).

Regarding claim 3, Hampton discloses in which the second frequency range includes frequencies of normal human speech (microphone picks up speech).

Regarding claims 4-10, the combination of Hampton and Atsmon teach that two distinct frequency ranges can be used to create two communication channels and that sound signals may be used for both. Although they do not disclose the exact claimed frequency ranges it would have been obvious to one of ordinary skill in the art use frequency ranges that have some separation between them, and to filter out all frequencies in those ranges of interest. The motivation to do so would have been to allow for a clear distinction between the two communication channels, and to reduce noise created by neighboring frequencies. Therefore at the time of invention, it would have been obvious to one of ordinary skill in the art to further comprise the limitations of claims 4-10.

Regarding claim 11, Hampton discloses in which the body includes at least one movable part (foot), and in which the sensible action includes one or more of illuminating a light, producing a sound (converses), and moving the at least one movable part.

Regarding claim 12, Hampton discloses a toy comprising:

a body (figure 2, item 12);

a signal detector (figure 44, items 1010 and 1008) adapted to detect signals in first and second frequency ranges and to exclude frequencies in a third frequency range

(frequencies between IR and highest frequency sensed by microphone are ignored)
between the first and second ranges; and

an output apparatus mounted in the body and configured to produce at least a first sensible action when the detected sound is determined to be in one or both of the first and second frequency ranges (foot taps, column 3 line 53 to column 4 line 22).

Hampton does not expressly disclose wherein both ranges are sound signals.

Atsmon discloses a toy ([0007]) that contains communication links, wherein communication links such as IR links may use ultrasonic links instead (paragraph [0003]).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the communication link of Atsmon in the system of Hampton. The motivation for doing so would have been eliminating the need for IR transmitters and receivers, thereby reducing costs. Therefore, it would have been obvious to combine Atsmon with Hampton to obtain the invention as specified in claim 12.

Regarding claim 13, Hampton discloses in which the first frequency range includes frequencies of normal human speech (microphone signals), and the second frequency range includes frequencies above normal human speech (IR signals).

Regarding claims 14-17, the combination of Hampton and Atsmon teach that two distinct frequency ranges can be used to create two communication channels and that sound signals may be used for both. Although they do not disclose the exact claimed

frequency ranges it would have been obvious to one of ordinary skill in the art use frequency ranges that have some separation between them, and to filter out all frequencies in those ranges of interest. The motivation to do so would have been to allow for a clear distinction between the two communication channels, and to reduce noise created by neighboring frequencies. Therefore at the time of invention, it would have been obvious to one of ordinary skill in the art to further comprise the limitations of claims 14-17.

Regarding claim 18, Atsmon discloses in which the frequencies in the second frequency range are more than four times the frequencies in the first frequency range (0.01-40Hz versus 16-50khz).

Regarding claim 19, Hampton discloses further comprising at least one movable part (foot), and in which the sensible action includes one or more of illuminating one or more lights, producing one or more sounds, and moving the at least one movable part (moving foot).

Regarding claim 20, Hampton discloses a toy comprising:

a body (figure 2, item 12);

a signal receiver (figure 44, items 1010 and 1008) mounted in the body and adapted to receive sounds in a first frequency range including sounds having frequencies between at least about 1 kHz and 10 kHz;

a first sound analyzer (figure 43, item 1002, portion responsive to SND signal) coupled to the signal receiver and adapted to produce a first control signal indicative of sound received in a second frequency range below about 2 kHz;

a second analyzer coupled (1002, portion responsive to IR-RX signal) to the signal receiver and adapted to produce a second control signal indicative of signals received in a third frequency range above about 5 kHz;

a first output device (foot taps, column 3 line 53 to column 4 line 22) mounted in the body, responsive to the first control signal, and adapted to produce a first sensible action when sound in the first frequency range is received; and

a second output device (speaker 1052 converses, column 3 line 53 to column 4 line 22) mounted in the body, responsive to the second control signal, and adapted to produce a second sensible action when sound in the second frequency range is received.

Hampton does not expressly disclose the frequency ranges as claimed.

Atsmon discloses a toy ([0007]) that contains communication links, wherein communication links such as IR links may use ultrasonic links instead (paragraph [0003], and may include a range above about 5 Hz (paragraph [0010])).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the communication link of Atsmon in the system of Hampton. The motivation for doing so would have been eliminating the need for IR transmitters and receivers, thereby reducing costs. Therefore, it would have been obvious to combine Atsmon with Hampton to obtain the invention as specified in claim 20.

Regarding claims 21-40, the method claims 21-40 are rejected in an analogous manner to the apparatus claims 1-20.

Regarding claim 41, Hampton discloses a toy comprising:

a body (figure 2, item 12);

means for detecting signals in at least a first frequency range above normal human speech (IR); and

means for producing a sensible action in the body when signals are detected in the first frequency range (speaker 1052 converses, column 3 line 53 to column 4 line 22).

Hampton does not expressly disclose wherein the signals are sound signals.

Atsmon discloses a toy ([0007]) that contains communication links, wherein communication links such as IR links may use ultrasonic links instead (paragraph [0003].

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the communication link of Atsmon in the system of Hampton. The motivation for doing so would have been eliminating the need for IR transmitters and receivers, thereby reducing costs. Therefore, it would have been obvious to combine Atsmon with Hampton to obtain the invention as specified in claim 41.

Regarding claim 42, Hampton discloses further comprising means for detecting sound in a second frequency range different than the first frequency range (microphone signals), and means for producing a second sensible action in the body when sound is detected in the second frequency range (foot taps, column 3 line 53 to column 4 line 22).

Regarding claim 43, Hampton discloses in which the second frequency range includes frequencies of normal human speech (voice commands).

Regarding claim 44, Hampton discloses a toy comprising:
a body (figure 2, item 12);
means for detecting (figure 44, items 1010 and 1008) signals in first and second frequency ranges;
means for rejecting frequencies in a third frequency range between the first and second ranges (filters for 1008 and 1010 found in figures 47 and 48); and
means for producing in the body at least a first sensible action when the detected sound is determined to be in one or both of the first and second frequency ranges (foot taps, column 3 line 53 to column 4 line 22).

Hampton does not expressly disclose wherein the signals are sound signals.

Atsmon discloses a toy ([0007]) that contains communication links, wherein communication links such as IR links may use ultrasonic links instead (paragraph [0003]).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the communication link of Atsmon in the system of Hampton. The motivation for doing so would have been eliminating the need for IR transmitters and receivers, thereby reducing costs. Therefore, it would have been obvious to combine Atsmon with Hampton to obtain the invention as specified in claim 44.

Regarding claims 45-46, the combination of Hampton and Atsmon teach that two distinct frequency ranges can be used to create two communication channels and that sound signals may be used for both. Although they do not disclose the exact claimed frequency ranges it would have been obvious to one of ordinary skill in the art use frequency ranges that have some separation between them, and to filter out all frequencies in those ranges of interest. The motivation to do so would have been to allow for a clear distinction between the two communication channels, and to reduce noise created by neighboring frequencies. Therefore at the time of invention, it would have been obvious to one of ordinary skill in the art to further comprise the limitations of claims 45-46.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Suthers whose telephone number is (571)272-0563. The examiner can normally be reached on 8am - 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571)272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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